

## INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB2004/052905

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01L29/792 H01L21/336 H01L21/8246

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 03/099708 A (MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD; YAMASHITA, ICHIRO) 4 December 2003 (2003-12-04) the whole document	1-6
E	-& EP 1 514 838 A (MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD) 16 March 2005 (2005-03-16) paragraphs '0033! - '0073!, '0088! - '0115!; figures 2-5,8-10	1-6
X	WO 02/03430 A (CALIFORNIA INSTITUTE OF TECHNOLOGY) 10 January 2002 (2002-01-10) page 1, line 9 - page 6, line 9 page 10, line 29 - page 17, line 30; figures 1,6-11	1-3,5

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

## \* Special categories of cited documents :

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Date of the actual completion of the International search

21 April 2005

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Internal	Application No
PCT/IB2004/052905	

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 843 360 A (HITACHI EUROPE LIMITED) 20 May 1998 (1998-05-20) column 3, line 14 – column 8, line 7 column 13, line 23 – column 17, line 42; figures 5,14-16 -----	1-3,5
X	US 2003/003300 A1 (KORGEL BRIAN A ET AL) 2 January 2003 (2003-01-02) paragraphs '0006!, '0010! – '0035!, '0092! – '0095!, '0112! – '0136!; claims 387-437; figure 4 -----	1-3,5,7
X	EP 1 226 878 A (MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD) 31 July 2002 (2002-07-31) paragraphs '0006! – '0015!, '0024!, '0025!, '0099! – '0105!, '0152! – '0158!, '0228! – '0245!; figures 1-3 -----	1-3,5
Y	EP 1 372 140 A (FUJITSU LIMITED) 17 December 2003 (2003-12-17) paragraphs '0029! – '0097!; figures 1-5 -----	7
X	EP 1 213 745 A (SONY INTERNATIONAL GMBH) 12 June 2002 (2002-06-12) paragraphs '0025! – '0058!, '0115! – '0117!, '0147! – '0155!, '0168! – '0170!; figures 3-6 -----	1,2,5
A	WO 01/62830 A (KUMACHEVA, EUGENIA) 30 August 2001 (2001-08-30) page 1, line 9 – page 7, line 13 -----	1-7

## INTERNATIONAL SEARCH REPORT

Internal	Application No
PCT/IB2004/052905	

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
WO 03099708	A	04-12-2003	AU	2003241813 A1		12-12-2003
			EP	1514838 A1		16-03-2005
			WO	03099708 A1		04-12-2003
			US	2004110347 A1		10-06-2004
EP 1514838	A	16-03-2005	AU	2003241813 A1		12-12-2003
			EP	1514838 A1		16-03-2005
			US	2004110347 A1		10-06-2004
			WO	03099708 A1		04-12-2003
WO 0203430	A	10-01-2002	WO	0203472 A2		10-01-2002
			WO	0203430 A2		10-01-2002
			US	2002074565 A1		20-06-2002
			US	2002098653 A1		25-07-2002
EP 0843360	A	20-05-1998	EP	0843360 A1		20-05-1998
			AU	736388 B2		26-07-2001
			AU	4360597 A		21-05-1998
			CA	2220782 A1		15-05-1998
			EP	0843361 A1		20-05-1998
			IL	122052 A		24-06-2003
			RU	2216821 C2		20-11-2003
			SG	101958 A1		27-02-2004
			US	6169308 B1		02-01-2001
			US	6753568 B1		22-06-2004
			US	2003205771 A1		06-11-2003
			US	5952692 A		14-09-1999
US 2003003300	A1	02-01-2003	WO	03003982 A2		16-01-2003
			US	2003034486 A1		20-02-2003
EP 1226878	A	31-07-2002	CN	1383166 A		04-12-2002
			EP	1226878 A2		31-07-2002
			JP	3597507 B2		08-12-2004
			JP	2003168606 A		13-06-2003
			TW	569195 B		01-01-2004
			US	2002142163 A1		03-10-2002
EP 1372140	A	17-12-2003	JP	2004014056 A		15-01-2004
			CN	1467706 A		14-01-2004
			EP	1372140 A1		17-12-2003
			US	2003228494 A1		11-12-2003
EP 1213745	A	12-06-2002	EP	1213745 A1		12-06-2002
			JP	2002208271 A		26-07-2002
			US	2002066915 A1		06-06-2002
WO 0162830	A	30-08-2001	AU	3528301 A		03-09-2001
			WO	0162830 A2		30-08-2001
			CA	2400539 A1		30-08-2001
			US	2003136946 A1		24-07-2003